AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.   (Currently Amended) A method of estimating ~~the~~ a signal-to-noise ratio of a ~~wanted signal, in particular a~~ digital signal[[,]] received by a radiocommunications receiver, ~~characterized in that, to minimize the estimation noise of the signal-to-noise ratio,~~ the method comprising:

estimating separately a wanted signal and ~~the~~ a noise signal of the digital signal; ~~are estimated separately and~~

filtering separately the wanted signal ~~(E_b)~~ and the noise ~~(N_0)~~ signal; and ~~are filtered (36, 44) separately before division (40) of~~

determining the signal-to-noise ratio by dividing the wanted signal which has been filtered by the noise signal which has been filtered,

wherein the filtering of the noise signal comprises determining a noise value which is used to determine the signal-to-noise ratio based on a statistical distribution of noise power measurements for a predetermined period during which a statistically representative number of measurement samples is collected and which is sufficiently short for the noise signal to remain practically stationary.

2.   (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the filtering ~~(36)~~ of the wanted signal ~~(E_b)~~ is different from the filtering ~~(44)~~ of the noise signal ~~(N_θ)~~.

3.   (Canceled)

4.   (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that the noise level used has a value (μ_NO + Δ_NO) such that the~~ wherein the noise value is determined such that a probability ~~(P)~~ that ~~the~~ an instantaneous noise level exceeds that ~~the noise~~ value is less than a predetermined threshold ~~(ε)~~ during the ~~observation~~ predetermined period ~~(T)~~.

5.   (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that~~ wherein the noise value used to determine the signal-to-noise ratio is ~~the~~ a maximum value of the measurement samples over the ~~particular~~ predetermined period ~~(T)~~.

6.   (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that the~~ wherein moments of the distribution are determined.

7.   (Currently Amended) A method according to claim 6, ~~characterized in that the~~ wherein an average ~~(μ)~~ μ and ~~the~~ a variance ~~(σ^2)~~ σ^2 of the distribution are determined in that the

noise value used is $\mu + n\sigma$, where σ is a standard deviation and $\underline{n}$ is a number determined

according to the predetermined threshold.

8.　　(Currently Amended)　A method according to claim 1, ~~characterized in that~~ wherein a finite or infinite impulse response low-pass filter is used to filter the noise signal.

9.　　(Currently Amended)　A method according to claim 1, ~~characterized in that~~ wherein a finite impulse response filter is used to filter the wanted signal (E_b).

10.　　(Currently Amended)　A method according to claim 9, ~~characterized in that~~ wherein the finite impulse response filter is an averaging filter.

11.　　(Currently Amended)　A method according to claim 9, ~~characterized in that the~~ wherein a transmitter provides a reference signal with a regular period at a particular level and the reference signal is utilized as the wanted signal to estimate the signal-to-noise ratio ~~is estimated from that reference signal~~.

12.　　(Currently Amended)　A method according to claim 1, ~~characterized in that~~ wherein an infinite impulse response filter is used to filter the estimate of the wanted signal.

13.   (Currently Amended) A method according to claim 12, ~~characterized in that~~ wherein a first order auto-regressive filter is used, for example, as expressed by the equation:

$$\hat{x}_i = (1 - a)\tilde{x}_i + a\,\hat{x}_{i-1}$$

where $\tilde{x}_i$ represents the instantaneous estimate of the wanted signal at time $\underline{i}$, $\hat{x}_i$ represents the smoothed estimate of the wanted signal at time $\underline{i}$ and $\underline{a}$ is an integration coefficient.

14.   (Currently Amended) A method according to claim 12 , ~~characterized in that~~ wherein packets or cells are received sporadically and each packet or cell received is filtered.

15.   (Currently Amended) ~~An application of the~~ <u>A</u> method according to claim 1<u>,</u> <u>further comprising</u> ~~to estimating~~ the signal-to-noise ratio ~~in a telecommunications receiver~~ ~~sending data for~~ controlling ~~the~~ <u>a transmit</u> power of a corresponding transmitter <u>based on the</u> <u>signal-to-noise ratio</u>.